

Accessibility in Gym Environments

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by

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Abstract

Exercise is an important part in maintaining a healthy lifestyle, yet many Americans with disabilities find that going to a gym may be more difficult than necessary due to several barriers. These barriers can be overcome by making improvements to the physical building and by training staff members to be able to assist people with various types of limitations. Tools such as the ADA Existing Facilities Checklist and AIMFREE can help gym owners increase the accessibility of their facilities. Making sure to continue expand and improve facilities will require that gym owners annually review their policies, procedures, and buildings. This paper provides information on disabilities and barriers to inclusion, how to overcome some of these barriers, and gives a checklist that will help facility owners begin to evaluate their own buildings and environments.

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Process Analysis Statement

This research paper was designed to be used as a means of sharing information as well as starting a conversation. As an aspiring physical therapist, I found the amount of people with disabilities who remained inactive to be a troubling statistic. So, my wish was to dive into the questions of “Why aren’t people with disabilities exercising more? How can gym owners help provide a more accessible environment?” Through researching multiple studies, government databases, advocacy sites, and more, I was able to put together a paper that provides information on types of disabilities, types of barriers, what gym environments are like, and methods of overcoming barriers. Finally, I wanted to make an easy grading system that gym owners could use to assess their own buildings and policies in order to spark an internal conversation within their businesses. Questions were constructed based on what research showed would provide a more welcome and accessible environment for people with disabilities.

While I wish I could have done more, I think what I have made is a good starting point to addressing problems within the exercise community. Through countless hours of research, I learned a lot about an issue that I will work towards improving as I continue my education and move into my future career as an exercise professional and a physical therapist.

Accessibility in Gym Environments

Introduction

There are many reasons why people remain inactive and avoid going to the gym, and for one of the least active populations, even more barriers are in place that make it unduly difficult for them to exercise. People with disabilities often find that going to gyms may pose to be a daunting task. Multiple kinds of barriers, ranging from physical to attitudinal, create an environment that may be unwelcoming and troubling to navigate for people with disabilities. This leads many people with disabilities to remain inactive, which can cause further health complications as well as financial burdens. For facility owners, removing these barriers can be difficult at times, but it is up to them and their staff members to create and maintain a gym environment that is friendly and accessible to all people, regardless of what kind of limitations they may or may not have.

Background

Exercise is an important part of maintaining a healthy lifestyle, and adults are recommended to reach “150 minutes to 300 minutes a week of moderate-intensity, or 75 minutes to 150 minutes a week of vigorous-intensity aerobic physical activity,” (United States Department of Health & Human Services [HHS], 2019). However, many Americans are unable to achieve this recommendation. An analysis of data from the 2009-2012 National Health Interview Survey reveals that 47.1% of adults with a disability aged 18-64 years are inactive, almost doubling the number of inactive adults of the same age without disabilities (26.1%) (Carroll et al., 2014). In the United States, about one in every four people has some kind of disability, resulting in about 61 million people with disabilities (Centers for Disease Control and

Prevention [CDC], 2017). This is a significant amount of people that do not participate in regular exercise which can lead to other health complications on medical costs.

Overall, exercise has been shown to improve quality of life. According to the World Health Organization (2018), regular physical activity has many health benefits, including improved muscular and cardiorespiratory fitness and improved bone and functional health; exercise also reduces the risk for cardiovascular diseases, some types of cancers, and may lower risk of falling. Regular physical activity can also have a profound mental health impact, as it can “relieve tension, anxiety, depression and anger,” (American Heart Association [AHA], 2015). Burning fat and maintaining a healthy weight are other essential functions and benefits of exercise, which is important as obesity rates continue to rise nationally. About 36% American adults with disabilities are classified as obese compared to 23% of American adults without disabilities (CDC, 2018). The risk for certain diseases such as type 2 diabetes, hypertension, and cardiovascular disease can increase with obesity (National Institute of Diabetes and Digestive and Kidney Diseases [NIDDK], 2015). Obesity can also have a significant financial impact; in 2008, it is estimated the direct per-person medical cost of obesity was \$1723 (Tsai, Williamson, & Glick, 2012).

Types of Disabilities

Understanding the different types of disabilities and their prevalence may offer information on potential barriers and facilitators. Though several definitions exist, the ADA “defines a person with a disability as a person who has a physical or mental impairment that substantially limits one or more major life activity” (“What is the definition of disability under the ADA?”, 2019). A statistics report conducted by Kraus, Lauer, Coleman, and Houtenville (2018) gave the percentage of prevalence of six types of disabilities in the United States for

2016. Ambulatory disabilities affected about 6.6% of the population, cognitive disabilities affected 4.8%, independent living difficulties affected 4.5%, hearing difficulties affected 3.5%, self-care disabilities affected 2.5%, and vision disabilities affected 2.4% (Kraus et al., 2018).

An ambulatory disability is one that affects a person's ability to walk as a means of transportation (U.S. Census Bureau, 2017). Often, people with ambulatory disabilities will require the use of a wheelchair.

A cognitive disability is one that presents itself as a limitation of mental functioning and "in skills such as communicating, taking care of him or herself, and social skills" (Ohio Coalition for the Education of Children with Disabilities [OCECD], n.d.).

Independent living difficulties are difficulties in "doing errands alone" due to a "physical, mental, or emotional problem" (U.S. Census Bureau, 2017).

Hearing difficulties come in three forms. Conductive hearing loss "occurs when sound is not sent easily through the outer ear canal to the eardrum and the tiny bones of the middle ear" and can be corrected either medically or surgically (American Speech-Language-Hearing Association [ASHA], 2015). Sensorineural hearing loss occurs when the inner ear or the cranial nerves are damaged in some capacity and, most of the time, cannot be corrected (ASHA, 2015). Mixed hearing loss is a combination of conductive and sensorineural hearing loss (ASHA, 2015).

A self-care disability is similar to independent living difficulties, however, they also include "taking care of [one's] personal needs," so activities of daily living like showering or dressing are difficult for people with self-care disabilities (CDC, 1993).

Visual impairments are limits in the ability to see that are not fixable by usual means like glasses or medication (Disabled World, 2018).

Barriers to Exercise

As maintaining a level of activity to achieve health benefits is important, it is essential to explore why some people with disabilities find it difficult to reach the suggested exercise goals. Today, there are still a number of barriers that prevent or make it difficult for people with disabilities to access, use, and feel comfortable in gym environments. According to the CDC (2018), there are seven common barriers: attitudinal, communication, physical, policy, programmatic, social, and transportation.

Common Barrier Types

Attitudinal barriers include stereotyping, stigma, prejudice, and discrimination and can contribute to other barriers. These can come in the form of assuming that people with disabilities have poor quality of life or that something is wrong with them (CDC, 2018).

Communication barriers occur in people with “disabilities that affect hearing, speaking, reading, writing, and or understanding, and who use different ways to communicate than people who do not have these disabilities” (CDC, 2018). Examples include written messages that people with vision impairments have difficult reading and auditory messages that people with hearing impairments may be unable to hear (CDC, 2018).

Physical barriers are those that impede mobility or access. These may come in the form of narrow doorways, steps that restrict accessibility of people with mobility impairments, or anything else that could restrict movement in or access to something (CDC, 2018).

Policy barriers relate to the “lack of awareness or enforcement of existing laws and regulations that require programs and activities be accessible to people with disabilities,” (CDC, 2018). This form of barrier can be seen when accommodations for people with disabilities as

instructed by law are not met, restricting their ability to access a service or perform a job (CDC, 2018).

Programmatic barriers “limit the effective delivery of a public health or healthcare program for people with different types of impairments,” (CDC 2018). These can be related to scheduling, lack of equipment, or knowledge of a given provider (CDC, 2018).

Social barriers are “related to the conditions in which people are born, grow, live, learn, work, and age” and come in many different forms like employment discrimination and a lower percentage of high school graduation in people with disabilities (CDC, 2018).

Transportation barriers interfere with the independence of a person to travel and move freely in society (CDC, 2018). This can be due to lack of transportation suited to people with disabilities that are convenient and accessible (CDC, 2018).

Americans with Disabilities Act

The Americans with Disabilities Act was put in place to remove barriers that may restrict accessibility for people with disabilities. In 1991, the ADA published its title II and title III regulations along with the ADA Accessibility Guidelines (ADA, n.d.). In 2010, ADA regulations were updated, and existing facilities had until March 15, 2012 to be in compliance (ADA, n.d.).

Title II and title III of the Americans with Disabilities Act apply to public services and public accommodations and series operated by private entities, respectively (“An overview of the Americans with Disabilities Act,” 2019). Title II prohibits discrimination by public entities towards people with disabilities, requires public entities make “programs, services and activities

accessible,” and sets standards for self-evaluation practices (“An overview of the Americans with Disabilities Act,” 2019). Title III requires places of public accommodation be accessible to people with disabilities, including privately owned facilities like gyms or hotels, requires that new buildings meet a minimum standard of accessibility, and requires that existing buildings make modifications where they are able to (“An overview of the Americans with Disabilities Act,” 2019). These two parts of the ADA are most relevant when discussing accessibility in gym environments and how physical barriers to exercise for people with disabilities can be overcome.

Gym Environments

Across the United States, barriers still remain that create undue difficulty for people with disabilities in gym environments. A study conducted by Johnson, Stoelzle, Finco, Foss, and Carstens (2012) examined fitness facility compliance with title III of the ADA in rural western Wisconsin and found that none of the facilities that participated in the study were in full compliance with the ADA. Another study conducted by Rimmer, Padalabalanarayanan, Malone, and Mehta (2017) used the Accessibility Instrument Measuring Fitness and Recreation Environments (AIMFREE) tool to examine the accessibility and usability of fitness facilities in 10 states and found that while scores were higher for facilities built after passage of the ADA, “only programs and water fountains had scaled scores ≥ 70 regardless of facility construction date.”

Physical barriers are not the only difficulties people with disabilities face; attitudinal and social barriers play a part in deterring people with disabilities from joining gyms or regularly using them for exercise. A study conducted by Rimmer, Riley, Wang, Rauworth, and Jurkowski (2004) asked four different focus groups, consisting of consumers with disabilities, architects, fitness and recreation professionals, and city planners and park district managers, about physical

activity participation. One of their findings was that there is a perception that gyms are unfriendly environments for people with disabilities, connecting with other comments they made about negative attitudes and behaviors of staff and other gym members who had no disability. Other emotional and psychological barriers that they noted included “fear of the unknown, concerns about needing and requesting assistance, and lack of support from friends and family,” (Rimmer et al., 2004). Another attitude that the researchers found was that the consumers thought the professionals considered “accessibility as either a ‘necessary evil’ or as unimportant,” (Rimmer et al., 2004). The professionals in the other focus group shared this view, “believing that persons with disabilities are not interested in engaging in fitness or recreation activities,” (Rimmer et al., 2004). The professionals also “identified staff laziness, negative attitudes toward persons with disabilities, and concerns about liability as major barriers,” (Rimmer et al., 2004).

Another reason why gyms may not be appealing to some people with disabilities is that many gyms may not have equipment that are looking for. For example, a man in Pennsylvania, whose legs are paralyzed, goes to a gym that attaches electrodes to his legs in order to stimulate muscular contractions while he is on a stationary bike (NBC, 2007). While this bike would certainly be welcome in many fitness facilities, a functional electrical stimulation (FES) bike are generally in the range of \$15,000 unless buying used (Christopher & Dana Reeve Foundation, n.d.). The expenses of purchasing equipment for different types of disabilities may not be something that some gym owners are willing to venture on.

While some fitness facility owners may be hesitant to alter their business models, make changes to facilities to better suit people with disabilities could lead to increased profitability. There is a relatively untapped market of about 61 million people with disabilities where about

47% of this number are not active. The business model of Planet Fitness was designed to appeal to casual gymgoers and those who may be nervous about signing up for a gym, and they provide their services for a fraction of the price of other fitness chains (Meyersohn, 2018). Their total revenue for the 2017 fiscal year “increased from the prior year by 13.7% to \$429.9 million (“Planet Fitness, Inc. Announces Fourth Quarter and Fiscal Year 2017 Results,” 2018). By removing as many barriers as possible and making fitness facilities more accessible, not only will many people with disabilities achieve health benefits from being able to exercise in an environment that is welcoming, facility owners may increase their revenue, resulting in a positive and transformative experience for all sides.

Overcoming Barriers

In order to provide accessible and welcoming gym environments, there are several measures that can be taken to overcome barriers that would prevent people with disabilities from exercising. Following and complying with ADA guidelines, changing gym policies, and training staff are helpful in making facilities easier to access and use.

Since title III of the ADA also includes fitness facilities, they are required to be meet a minimum standard of accessibility as previously mentioned. Some of these standards are easier to comply with, such as offering handicapped parking spaces if the facility owns and operates a parking lot, expanding doorways and stalls, and rearranging exercise equipment or the general layout in order to make the equipment more accessible (Disability Rights Education & Defense Fund [DREDF], n.d.). Rearranging exercise equipment will likely be the easiest thing to do first for any gym owner. According to the U.S. Access Board (n.d.), “At least one of each type of exercise equipment or machine must have clear floor space of at least 30 by 48 inches and be

served by an accessible route. If the clear space is enclosed on three sides, the clear space must be at least 36 by 48 inches.”

Other requirements may need more resources and time to complete. If the sidewalk in front of the facility is owned by said facility, then they are required to have a curb ramp; if it is not owned by the facility, then it is the responsibility of the municipality to provide the curb ramp (DREDF, n.d.). If equipment is separated by levels, the facility will need to find a way to make it accessible. An elevator may not be practical for the facility, so other methods like wheelchair lifts or portable ramps, depending on how many steps there, are both potential solutions (DREDF, n.d.). Finding ways to overcome these physical barriers may require some creativity on the part of the facility owner. Facility owners who are unsure whether their buildings are up to code should review ADA guidelines and create a plan to meet the minimum standards in a reasonable timeframe.

People with vision and hearing impairments may require different methods of communication in order to get a message across. For example, printed information may be difficult for a person with a vision impairment to effectively read; so, a way of overcoming this barrier would be to have another form of the information with printed with larger font or to have the message available in an audio format (DREDF, n.d.). People with hearing impairments may require someone with sign language be able to interpret for them or another method of communicating, such as writing or typing, could be used (DREDF, n.d.).

Another way to make gyms more accessible is to change facility policies. For example, LA Fitness was required to “revise and strengthen its policies” after it was investigated following complaints that the business refused to waive fees for members who required aides to accompany them (Keenan, 2016). Allowing aides free access to facilities is a simple policy change that will

make using gyms easier for people who require aides. Providing assistance around the gym for people with visual impairments free of charge can make an impact as well.

Becoming familiar on how to work with people with different disabilities and training staff members is another to make everyone feel more welcome in gym environments. Understanding that the same principles of exercise apply to everyone is important when working in an gym setting. Different people will have different limitations (Principle of Individuality) and effectively communicating with clients about what their limitations are will allow staff to properly develop exercise plans. Working with clients and experimenting with different methods of training will allow for the best results (North Carolina Office on Disability and Health [NCODH], 2008). Training staff members to assist people with disabilities will allow members to feel more comfortable with exercising. Things staff members can be trained on may include transfer maneuvers, sensitivity, and communication methods.

Purchasing different types of equipment to assist in exercising for people with various disabilities is a way to overcome programmatic barriers that may be limiting the effectiveness of gym visits for some people with disabilities. Finding equipment that is easy to enter and exit or has swing away seats for people who require more space for transfers along with purchasing equipment with wider seats and benches can help people with mobility impairments (NCODH, 2008). Also, finding multistation equipment that offers “a wide range of resistance activities in a small space” is a good method of making equipment more accessible (NCODH, 2008). Much of this equipment does not have to be specifically designed for people with disabilities, but finding equipment that everyone can use, like free weights and the multistation equipment, will allow facilities to be accessible to more people while not going overbudget (NCODH, 2008). However, having equipment like upper arm ergometers or Nu-Step Recumbent Steppers that are

more designed to assist people with limitations may prove beneficial in attracting more gym members (NCODH, 2008).

Fitness Facility Grading System

There are many ways to make fitness facilities more accessible to people with disabilities. Following ADA guidelines will help address the removal of physical barriers that limit accessibility. AIMFREE is an instrument that was “developed to measure the accessibility of fitness and recreation facilities as it pertains to persons with mobility impairments” and is available for purchase through the National Center on Health, Physical Activity and Disability (National Rehabilitation Information Center [NARIC], 2010).

The following is a simple grading system that is designed to give fitness facility owners a framework to develop a plan for accessibility improvement in their buildings and programs. There are four categories: Needs Improvement, Meets Expectations, Above Average, Exceptional. A tool that will be required is the ADA Checklist for Existing Facilities based on the 2010 ADA Standards for Accessible Design which can be found at www.adachecklist.org. Reviewing and answering the following questions will guide category placement:

- 1) Are new staff members trained in assisting people with disabilities?
- 2) Is there continuing education provided for staff members?
- 3) Are written messages available in larger font or audio format?
- 4) Is there an effective method in place to communicate with people who have a visual, hearing, speech, or mental impairment?
- 5) Are personal aides allowed into the facility free of charge?

- 6) Is there strength equipment that someone with a mobility impairment would be able to use?
- 7) Is there aerobic equipment that someone with a mobility impairment would be able to use?
- 8) Is the facility easily navigable?
- 9) Are doors wider than minimum ADA requirement? (32 inches)
- 10) Are paths wider than minimum ADA requirement? (36 inches)
- 11) Do staff or other gym members display negative attitudes or behaviors towards people with disabilities?
- 12) Is there a test membership period available?
- 13) Is there a family bathroom available?
- 14) Is there a suggestion/complaint system in place that is consistently reviewed?
- 15) If fitness classes or programs are offered, are people with disabilities able to participate with modifications when needed?
- 16) Are inclusivity and accessibility policies reviewed annually?
- 17) Is positive language used when talking or referring to people with disabilities?
- 18) Are wrist cuffs or Velcro straps available for people with grip limitations?
- 19) Is accessibility included in the budget?
- 20) If there are irremovable barriers to participation or access, are the methods to circumvent these barriers in place?

Yes = 1 point, No = 0 points*

*No on #11 = 1 point, Yes = 0 points

Needs Improvement

This category is for fitness facilities that do not currently meet minimum ADA standards, regardless of answers to the above questions. This includes the spacing required for exercise equipment (30 inches by 48 inches clear required and served by an accessible route or 36 by 48 inches if enclosed on three sides).

If, after going through the ADA Checklist for Existing Facilities, a facility owner finds that their building is not in ADA compliance, a plan should be put in place to make the necessary changes.

Meets Expectations

This category is for fitness facilities that are in compliance with minimum ADA building standards and receive a score of 10/20 or lower on the questionnaire. While an effort is made to meet the standards, more can be done to help members with disabilities.

Above Average

This category is for fitness facilities that are in compliance with ADA standards and receive a score between 11/20 and 15/20. These facilities go beyond the minimum but still show some room for improvement.

Exceptional

This category is for fitness facilities that are in compliance with ADA standards and are exceptionally accessible to people with disabilities, scoring at least 16/20.

Conclusion

Barriers to accessibility in gym environments still remain across the United States, creating undue difficulty for people with disabilities who wish to exercise. Although some barriers may be more complex and could require more time and resources, facility owners can begin gaining the knowledge to help remove and overcome these barriers. Facility owners and their staff can also help gym members by learning about the different kinds of disabilities and how to provide assistance to people who may need it. While it is important to meet and exceed standards for creating an accessible environment, it is important that owners do not become complacent. Continuously reviewing policies and recommendations are essential in continuing to tear down barriers to exercise for people with disabilities.

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